Patent Claims

1. Pyridinylanilides of the formula (I)

5 in which

R represents hydrogen, fluorine, chlorine, methyl or trifluoromethyl;

R¹, R² and R³ independently of one another each represents hydrogen, halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl;

or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety;

or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents in each case the grouping $-C(Q^1)=N-Q^2$, wherein

- Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and
- Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkylthio, C₁-C₄-alkylthio, C₁-C₄-alkylt

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alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy, represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy;

or

 R^4

 \mathbb{R}^5

R² and R³, if attached to the pyridinyl moiety in ortho position to each other, furthermore together represent C₃-C₄-alkylene, C₃-C₄-alkenylene, C₂-C₃-oxyalkylene or C₁-C₂-dioxyalkylene, in each case optionally mono- to tetra-substituted, identically or differently, by fluorine, chlorine, oxo, methyl, ethyl, trifluoromethyl;

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represents hydrogen, C₁-C₈-alkyl, C₁-C₆-alkylsulfinyl, C₁-C₆-alkylsulfonyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-cycloalkyl; C₁-C₆-halogenoalkyl, C₁-C₄-halogenoalkylthio, C₁-C₄-halogenoalkylsulfinyl, C₁-C₄-halogenoalkylsulfonyl, halogeno-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-halogenocycloalkyl having in each case 1 to 9 fluorine-, chlorine- and/or bromine atoms; formyl-C₁-C₃-alkyl, (C₁-C₃-alkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃-alkoxy)carbonyl-C₁-C₃-alkyl; (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃-halogenoalkoxy)carbonyl-C₁-C₃-alkyl having in each case 1 to 7 fluorine-, chlorine- and/or bromine atoms, (C₁-C₃-alkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-alkoxy)-carbonyl-C₁-C₃-halogenoalkyl having in each case 1 to 6 fluorine-, chlorine- and/or bromine atoms, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl)carbonyl

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represents hydrogen, C₁-C₈-alkyl, C₁-C₈-alkoxy, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-cycloalkyl; C₁-C₆-halogenoalkyl, C₁-C₆-halogenoalkoxy, halogeno-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-halogenocycloalkyl having in each case 1 to 9 fluorine-, chlorine-and/or bromine atoms; or -COR¹⁰.

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R⁶ and R⁷ independently of one another each represent hydrogen, C₁-C₈-alkyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-cycloalkyl; C₁-C₈-halogenoalkyl, halogeno-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-halogenocycloalkyl having in each case 1 bis 9 fluorine-, chlorine-and/or bromine atoms.

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R⁶ and R⁷ furthermore together with the nitrogen atom to which they are attached, represent a saturated 5- to 8-membered heterocycle, which heterocycle may have 1 or 2 additional, non-adjacent heteroatoms selected from the group consisting of oxygen, sulphur and NR¹¹, and which heterocycle may optionally be mono- to poly-substitu-

ted, identically or differently, by halogen or C1-C4-alkyl,

R⁸ and R⁹ independently of one another each represent hydrogen, C₁-C₈-alkyl, C₃-C₈-cycloal-kyl; C₁-C₈-halogenoalkyl, C₃-C₈-halogenocycloalkyl having in each case 1 bis 9 fluorine-, chlorine- and/or bromine atoms,

R⁸ and R⁹ furthermore together with the nitrogen atom to which they are attached, represent a saturated 5- to 8-membered heterocycle, which heterocycle may have 1 or 2 additional, non-adjacent heteroatoms selected from the group consisting of oxygen, sulphur and NR¹¹, and which heterocycle may optionally be mono- to poly-substituted, identically or differently, by halogen or C₁-C₄-alkyl,

10 R¹⁰ represents hydrogen, C₁-C₈-alkyl, C₁-C₈-alkoxy, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-cycloalkyl; C₁-C₆-halogenoalkyl, C₁-C₆-halogenoalkoxy, halogeno-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-halogenocycloalkyl having in each case 1 to 9 fluorine-, chlorine-and/or bromine atoms,

R¹¹ represents hydrogen or C₁-C₆-alkyl,

A represents a radical of the formula (A1)

$$\mathbb{R}^{12}$$
 \mathbb{R}^{13}
 \mathbb{R}^{14}
(A1), wherein

R¹² represents hydrogen, cyano, halogen, nitro, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₃-C₆-cycloalkyl, C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkoxy or C₁-C₄-halogenoalkylthio each having 1 to 5 halogen atoms, aminocarbonyl or aminocarbonyl-C₁-C₄-alkyl and

 R^{13} represents hydrogen, halogen, cyano, C_1 - C_4 -alkyl, C_1 - C_4 -alkoxy or C_1 - C_4 -alkylthio and

R¹⁴ represents hydrogen, C₁-C₄-alkyl, hydroxy-C₁-C₄-alkyl, C₂-C₆-alkenyl, C₃-C₆-cycloalkyl, C₁-C₄-alkylthio-C₁-C₄-alkyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₁-C₄-halogenoalkylthio-C₁-C₄-alkyl, C₁-C₄-halogenoalkoxy-C₁-C₄-alkyl each having 1 to 5 halogen atoms, or phenyl,

A represents a radical of the formula (A2)

 R^{15} and R^{16} independently of one another each represent hydrogen, halogen, $C_1\text{-}C_4\text{-}$

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or

alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms and

R¹⁷ represents halogen, cyano or C₁-C₄-alkyl, or C₁-C₄-halogenoalkyl or C₁-C₄-halogenoalkoxy each having 1 to 5 halogen atoms,

or

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A represents a radical of the formula (A3)

 R^{18} and R^{19} independently of one another each represent hydrogen, halogen, C_1 - C_4 -alkyl or C_1 - C_4 -halogenoalkyl having 1 to 5 halogen atoms and

R²⁰ represents hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

or

A represents a radical of the formula (A4)

R²¹ represents hydrogen, halogen, hydroxyl, cyano, C₁-C₆-alkyl, C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkoxy or C₁-C₄-halogenoalkylthio each having 1 to 5 halogen atoms,

or

A represents a radical of the formula (A5)

$$\mathbb{R}^{23}$$
 (A5), wherein

R²² represents halogen, hydroxyl, cyano, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkylthio or C₁-C₄-halogenoalkoxy each having 1 to 5 halogen atoms and

R²³ represents hydrogen, halogen, cyano, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkoxy each having 1 to 5 halogen atoms, C₁-C₄-alkylsulphinyl or C₁-C₄-alkylsulphonyl,

or

A represents a radical of the formula (A6)

$$R^{25}$$
 (A6), wherein

R²⁴ represents C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms and

R²⁵ represents C₁-C₄-alkyl,

Q³ represents a sulphur or oxygen atom, represents SO, SO₂ or CH₂,

p represents 0, 1 or 2, where R²⁵ represents identical or different radicals if p represents 2,

or

A represents a radical of the formula (A7)

R²⁶ represents C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

10 or

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A represents a radical of the formula (A8)

R²⁷ represents C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

or

15 A represents a radical of the formula (A9)

 R^{28} and R^{29} independently of one another each represent hydrogen, halogen, amino, C_1 - C_4 -alkyl or C_1 - C_4 -halogenoalkyl having 1 to 5 halogen atoms and

R³⁰ represents hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

or

A represents a radical of the formula (A10)

 R^{31} and R^{32} independently of one another each represent hydrogen, halogen, amino, nitro, C_1 - C_4 -alkyl or C_1 - C_4 -halogenoalkyl having 1 to 5 halogen atoms and

R³³ represents hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

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A represents a radical of the formula (A11)

R³⁴ represents hydrogen, halogen, amino, C₁-C₄-alkylamino, di-(C₁-C₄-alkyl)-amino, cyano, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms and

R³⁵ represents halogen, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

or

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A represents a radical of the formula (A12)

R³⁶ represents hydrogen, halogen, amino, C₁-C₄-alkylamino, di-(C₁-C₄-alkyl)-amino, cyano, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms and

R³⁷ represents halogen, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

or

A represents a radical of the formula (A13)

R³⁸ represents halogen, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

or

A represents a radical of the formula (A14)

 R^{39} represents hydrogen or C_1 - C_4 -alkyl and

25 R⁴⁰ represents halogen or C₁-C₄-alkyl,

or

A represents a radical of the formula (A15)

R⁴¹ represents C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

or

A represents a radical of the formula (A16)

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R⁴² represents hydrogen, halogen, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl having 1 to 5 halogen atoms,

or

A represents a radical of the formula (A17)

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R⁴³ represents halogen, hydroxyl, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkylthio or C₁-C₄-halogenoalkoxy each having 1 to 5 halogen atoms,

15 excluded compounds of the formula (I), in which

R represents hydrogen and

R¹, R² and R³ independently of one another each represents hydrogen, halogen; or straightchain or branched alkyl having 1 to 4 carbon atoms; or straight-chain or branched halogenoalkyl having 1 to 4 carbon atoms; and

20 R⁴ represents hydrogen

and

A represents a radical of the formula (A1)

$$\mathbb{R}^{12}$$
 \mathbb{R}^{13}
 \mathbb{R}^{14}
(A1), wherein

R¹² represents halogen, C₁-C₄-alkyl, C₁-C₄-halogenoalkyl and

R¹³ represents hydrogen and.

R¹⁴ represents methyl,

or

A represents a radical of the formula (A2)

 R^{15} and R^{16} independently of one another each represent hydrogen or C_1 - C_4 -alkyl and R^{17} represents halogen, C_1 - C_4 -alkyl or C_1 - C_4 -halogenoalkyl,

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A represents a radical of the formula (A4)

R²¹ represents halogen, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl,

or

10 A represents a radical of the formula (A5)

$$\mathbb{R}^{23}$$
 \mathbb{N} \mathbb{R}^{22} (A5), wherein

R²² represents halogen and

R²³ represents hydrogen,

or

15 A represents a radical of the formula (A6)

$$R^{25}$$
 (A6), wherein

R²⁴ represents methyl and

Q³ represents a sulphur or CH₂,

p represents 0,

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A represents a radical of the formula (A9)

 R^{28} and R^{29} independently of one another each represent hydrogen or C_1 - C_4 -alkyl and R^{30} represents methyl,

25 or

A represents a radical of the formula (A11)

R³⁴ represents hydrogen or C₁-C₄-alkyl and

R³⁵ represents halogen, C₁-C₄-alkyl or C₁-C₄-halogenoalkyl,

or

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A represents a radical of the formula (A16)

R⁴² represents halogen.

- 2. Pyridinylanilides of the formula (I) according to Claim 1, in which
- 10 R represents hydrogen, fluorine, chlorine, methyl or trifluoromethyl;
 - R¹, R² and R³ independently of one another each represents hydrogen, halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl;

or represents in each case straight-chain or branched alkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 4 carbon atoms and 1 to 9 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkyl-carbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 4 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

- Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms or C₃-C₆-cycloalkyl and
- Q² represents hydroxyl, C₁-C₄-alkyl, C₁-C₄-alkoxy, C₁-C₄-halogenoalkyl or C₁-C₄-halogenoalkoxy each having 1 to 9 identical or different halogen atoms,

R² and R³, if attached to the pyridinyl moiety in ortho position to each other, furthermore together represent -(CH₂)₃-, -(CH₂)₄-, -CH=CH-CH=CH-, -O(CH₂)₂-, -O(CH₂)₃-,

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-OCH₂O-, -O(CH₂)₂O-, in each case optionally mono- to tetra-substituted, identically or differently, by fluorine, chlorine, oxo, methyl, ethyl, trifluoromethyl,

- represents hydrogen; C₁-C₆-alkyl, C₁-C₄-alkylsulfinyl, C₁-C₄-alkylsulfonyl, C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-cycloalkyl; C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkylthio, C₁-C₄-halogenoalkylsulfinyl, C₁-C₄-halogenoalkylsulfonyl, halogeno-C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-halogenocycloalkyl having in each case 1 to 9 fluorine-, chlorine-and/or bromine atoms; formyl-C₁-C₃-alkyl, (C₁-C₃-alkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃-alkoxy)carbonyl-C₁-C₃-alkyl; (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃-halogenoalkoxy)carbonyl-C₁-C₃-alkyl having in each case 1 to 7 fluorine-, chlorine-and/or bromine atoms, (C₁-C₃-alkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-alkoxy)carbonyl-C₁-C₃-halogenoalkyl having in each case 1 to 6 fluorine-, chlorine- and/or bromine atoms, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl) having in each case 1 to 13 fluorine-, chlorine- and/or bromine atoms; -COR⁵, -CONR⁶R⁷ or -CH₂NR⁸R⁹,
 - R⁵ represents hydrogen, C₁-C₆-alkyl, C₁-C₄-alkoxy, C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-cycloalkyl; C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkoxy, halogeno-C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-halogenocycloalkyl having in each case 1 to 9 fluorine-, chlorine-and/or bromine atoms; or -COR¹⁰,
 - R⁶ and R⁷ independently of one another each represent hydrogen, C₁-C₆-alkyl, C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-cycloalkyl; C₁-C₄-halogenoalkyl, halogeno-C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-halogenocycloalkyl having in each case 1 to 9 fluorine-, chlorine- and/or bromine atoms,
 - R⁶ and R⁷ furthermore together with the nitrogen atom to which they are attached, represent a saturated 5- to 8-membered heterocycle, which heterocycle may have 1 or 2 additional, non-adjacent heteroatoms selected from the group consisting of oxygen, sulphur and NR¹¹, and which heterocycle may optionally be mono- to tetra-substituted, identically or differently, by halogen or C₁-C₄-alkyl,
 - R⁸ and R⁹ independently of one another each represent hydrogen, C₁-C₆-alkyl, C₃-C₆-cycloalkyl; C₁-C₄-halogenoalkyl, C₃-C₆-halogenocycloalkyl having in each case 1 to 9 fluorine-, chlorine- and/or bromine atoms,
 - R⁸ and R⁹ furthermore together with the nitrogen atom to which they are attached, represent a saturated 5- to 8-membered heterocycle, which heterocycle may have 1 or 2 additional, non-adjacent heteroatoms selected from the group consisting of oxygen, sulphur and NR¹¹, and which heterocycle may optionally be mono- to tetra-substituted, identically or differently, by halogen or C₁-C₄-alkyl,

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R¹⁰ represents hydrogen, C₁-C₆-alkyl, C₁-C₄-alkoxy, C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-cycloalkyl; C₁-C₄-halogenoalkyl, C₁-C₄-halogenoalkoxy, halogeno-C₁-C₃-alkoxy-C₁-C₃-alkyl, C₃-C₆-halogenocycloalkyl having in each case 1 to 9 fluorine-, chlorine-and/or bromine atoms,

R¹¹ represents hydrogen or C₁-C₄-alkyl,

A represents a radical of the formula (A1)

$$R^{12}$$
 N
 R^{13}
(A1), wherein

R¹² represents hydrogen, cyano, fluorine, chlorine, bromine, iodine, methyl, ethyl, iso-propyl, methoxy, ethoxy, methylthio, ethylthio, cyclopropyl, C₁-C₂-halogenoalkyl, C₁-C₂-halogenoalkoxy each having 1 to 5 fluorine, chlorine and/or bromine atoms, trifluoromethylthio, difluoromethylthio, aminocarbonyl, aminocarbonylmethyl or aminocarbonylethyl and

R¹³ represents hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, methoxy, ethoxy, methylthio or ethylthio and

R¹⁴ represents hydrogen, methyl, ethyl, n-propyl, iso-propyl, C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms, hydroxymethyl, hydroxyethyl, cyclopropyl, cyclopentyl, cyclohexyl or phenyl,

or

A represents a radical of the formula (A2)

R¹⁵ and R¹⁶ independently of one another each represent hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms and

R¹⁷ represents fluorine, chlorine, bromine, cyano, methyl, ethyl, C₁-C₂-halogenoalkyl or C₁-C₂-halogenoalkoxy each having 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A represents a radical of the formula (A3)

R¹⁸ and R¹⁹ independently of one another each represent hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms and

R²⁰ represents hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A represents a radical of the formula (A4)

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R²¹ represents hydrogen, fluorine, chlorine, bromine, iodine, hydroxyl, cyano, C₁-C₄-alkyl, C₁-C₂-halogenoalkyl, C₁-C₂-halogenoalkoxy or C₁-C₂-halogenoalkylthio each having 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A represents a radical of the formula (A5)

$$\mathbb{R}^{23}$$
 (A5), wherein

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R²² represents fluorine, chlorine, bromine, iodine, hydroxyl, cyano, C₁-C₄-alkyl, methoxy, ethoxy, methylthio, ethylthio, difluoromethylthio, trifluoromethylthio, C₁-C₂-halogenoalkyl or C₁-C₂-halogenoalkoxy each having 1 to 5 fluorine, chlorine and/or bromine atoms and

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R²³ represents hydrogen, fluorine, chlorine, bromine, iodine, cyano, C₁-C₄-alkyl, methoxy, ethoxy, methylthio, ethylthio, C₁-C₂-halogenoalkyl or C₁-C₂-halogenoalkoxy each having 1 to 5 fluorine, chlorine and/or bromine atoms, C₁-C₂-alkylsulphinyl or C₁-C₂-alkylsulphonyl,

or

A represents a radical of the formula (A6)

$$R^{25}$$
 (A6), wherein

R²⁴ represents methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms and

R²⁵ represents methyl or ethyl,

Q³ represents a sulphur atom, SO₂ or CH₂,

p represents 0 or 1,

or

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A represents a radical of the formula (A9)

R²⁸ and R²⁹ independently of one another each represent hydrogen, fluorine, chlorine, bromine, amino, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms and

R³⁰ represents hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A represents a radical of the formula (A10)

R³¹ and R³² independently of one another each <u>preferably</u> represent hydrogen, fluorine, chlorine, bromine, amino, nitro, methyl, ethyl or C₁-C₂-halogeno-alkyl having 1 to 5 fluorine, chlorine and/or bromine atoms and

R³³ represents hydrogen, fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms,

20 or

A represents a radical of the formula (A11)

R³⁴ represents hydrogen, fluorine, chlorine, bromine, amino, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino, cyano, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms and

R³⁵ represents fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms,

or

A represents a radical of the formula (A12)

R³⁶ represents hydrogen, fluorine, chlorine, bromine, amino, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino, cyano, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms and

R³⁷ represents fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂-halogenoalkyl having 1 to 5 fluorine, chlorine and/or bromine atoms,

or

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A represents a radical of the formula (A17)

10 R⁴³ preferably represents fluorine, chlorine, bromine, iodine, hydroxyl, C₁-C₄-alkyl, methoxy, ethoxy, methylthio, ethylthio, difluoromethylthio, trifluoromethylthio, C₁-C₂-halogenoalkyl or C₁-C₂-halogenoalkoxy each having 1 to 5 fluorine, chlorine and/or bromine atoms,

15 excluded compounds of the formula (I), in which

R represents hydrogen and

R¹, R² and R³ independently of one another each represents hydrogen, halogen; or straightchain or branched alkyl having 1 to 4 carbon atoms; or straight-chain or branched halogenoalkyl having 1 to 4 carbon atoms; and

20 R⁴ represents hydrogen and

A represents a radical of the formula (A1)

$$R^{12}$$
 N
 R^{13}
 R^{14}
(A1), wherein

 R^{12} represents fluorine, chlorine, bromine, iodine, methyl, ethyl, iso-propyl, C_1 - C_2 -halogenoalkyl and

R¹³ represents hydrogen and

R¹⁴ represents methyl,

or

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A represents a radical of the formula (A2)

 R^{15} and R^{16} independently of one another each represent hydrogen, methyl or ethyl and

R¹⁷ represents fluorine, chlorine, bromine, methyl, ethyl, or C₁-C₂-halogenoalkyl,

5 or

A represents a radical of the formula (A4)

R²¹ represents fluorine, chlorine, bromine, iodine, C₁-C₄-alkyl or C₁-C₂-halogenoalkyl,

10 or

A represents a radical of the formula (A5)

$$\mathbb{R}^{23}$$
 (A5), wherein

R²² represents fluorine, chlorine, bromine, iodine and

R²³ represents hydrogen,

15 or

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A represents a radical of the formula (A6)

$$R^{25}$$
 (A6), wherein

R²⁴ represents methyl and

Q³ represents a sulphur or CH₂,

p represents 0,

or

A represents a radical of the formula (A9)

$$R^{29}$$
 R^{28}
 R^{30}
(A9), wherein

R²⁸ and R²⁹ independently of one another each represent hydrogen, methyl or ethyl and

R³⁰ represents methyl,

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or

A represents a radical of the formula (A11)

R³⁴ represents hydrogen, methyl or ethyl and

R³⁵ represents fluorine, chlorine, bromine, methyl, ethyl or C₁-C₂-halogenoalkyl.

3. Pyridinylanilides of the formula (I) according to Claim 1, in which

R represents hydrogen, fluorine, chlorine, methyl or trifluoromethyl;

R¹, R² and R³ independently of one another each represents hydrogen, fluorine, chlorine, bromine, cyano; methyl, ethyl, n- or iso-propyl, n-, iso-, sec- or tert-butyl, methoxy, ethoxy, n- or iso-propoxy, n-, iso-, sec- or tert-butoxy, methylthio, ethylthio, n- or iso-propylthio, n-, iso-, sec- or tert-butylthio, trifluoromethyl, trifluoroethyl, difluoromethoxy, trifluoromethoxy, difluorochloromethoxy, trifluoroethoxy, cyclopropyl, cyclopentyl, cyclohexyl,

or represents the grouping -C(Q¹)=N-Q², wherein

Q¹ represents hydrogen, methyl, ethyl, trifluoromethyl or cyclopropyl, and

Q² represents hydroxyl, methoxy, ethoxy, n-propoxy or iso-propoxy,

or

R² and R³, if attached to the pyridinyl moiety in ortho position to each other, furthermore together represent -(CH₂)₃-, -(CH₂)₄-, -CH=CH-CH=CH-, -OCH₂O-, -O(CH₂)₂O-, -O(CF₂)₂O-,

 R^4 represents hydrogen, methyl, ethyl, n- or iso-propyl, n-, iso-, sec- or tert-butyl, pentyl or hexyl, methylsulfinyl, ethylsulfinyl, n- or iso-propylsulfinyl, n-, iso-, sec- or tertbutylsulfinyl, methylsulfonyl, ethylsulfonyl, n- or iso-propylsulfonyl, n-, iso-, sec- or tert-butylsulfonyl, methoxymethyl, methoxyethyl, ethoxymethyl, cyclopropyl, cyclopentyl, cyclohexyl, trifluoromethyl, trifluoroethyl, difluoromethylthio, difluorochloromethylthio, trifluoromethylthio, trifluoromethylsulfinyl, trifluoromethylsulfonyl, trifluoromethoxymethyl; -CH₂-CHO, -CH₂CH₂-CHO, -CH2-CO-CH3, -CH₂-CO-CH₂CH₃, -CH₂-CO-CH(CH₃)₂, -CH₂CH₂-CO-CH₃, -CH₂CH₂-CO-CH₂CH₃, -CH₂CH₂-CO-CH(CH₃)₂, $-CH_2-C(O)OCH_3$ -CH₂-C(O)OCH₂CH₃, -CH₂-C(O)OCH(CH₃)₂, -CH₂CH₂-C(O)OCH₃, -CH₂CH₂-C(O)OCH₂CH₃, -CH₂CH₂-C(O)OCH(CH₃)₂, -CH₂-CO-CF₃, -CH₂-CO-CCl₃, -CH₂-CO-CH₂CF₃, -CH2-CO-CH2CCl3,

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-CH₂CH₂-CO-CH₂CF₃, -CH₂CH₂-CO-CH₂CCl₃, -CH₂-C(O)OCH₂CF₃, -CH₂-C(O)OCF₂CF₃, -CH₂-C(O)OCH₂CCl₃, -CH₂-C(O)OCCl₂CCl₃, -CH₂CH₂-C(O)OCH₂CF₃, -CH₂CH₂-C(O)OCF₂CF₃, -CH₂CH₂-C(O)OCH₂CCl₃, -CH₂CH₂-C(O)O-CCl₂CCl₃; -COR⁵, -CONR⁶R⁷ or -CH₂NR⁸R⁹,

R⁵ represents hydrogen, methyl, ethyl, n- or iso-propyl, tert-butyl, methoxy, ethoxy, tert-butoxy, cyclopropyl; trifluoromethyl, trifluoromethoxy; or -COR¹⁰,

R⁶ and R⁷ independently of one another each represent hydrogen, methyl, ethyl, n- or isopropyl, n-, iso-, sec- or tert-butyl, methoxymethyl, methoxyethyl, ethoxymethyl, ethoxyethyl, cyclopropyl, cyclopentyl, cyclohexyl; trifluoromethyl, trifluoromethyl, trifluoromethoxymethyl,

R⁶ and R⁷ furthermore together with the nitrogen atom to which they are attached, represent a saturated heterocycle selected from the group consisting of morpholine, thiomorpholine and piperazine, which heterocycle may optionally be mono- to tetra-substituted, identically or differently, by fluorine, chlorine, bromine or methyl and where the piperazine additionally at the second nitrogen atom may be substituted by R¹¹,

R⁸ and R⁹ independently of one another each represent hydrogen, methyl, ethyl, n- or isopropyl, n-, iso-, sec- or tert-butyl, methoxymethyl, methoxyethyl, ethoxymethyl, ethoxyethyl, cyclopentyl, cyclopentyl, trifluoromethyl, trifluoromethyl, trifluoromethoxymethyl,

R⁸ and R⁹ furthermore together with the nitrogen atom to which they are attached, represent a saturated heterocycle selected from the group consisting of morpholine, thiomorpholine and piperazine, which heterocycle may optionally be mono- to tetra-substituted, identically or differently, by fluorine, chlorine, bromine or methyl and where the piperazine additionally at the second nitrogen atom may be substituted by R¹¹,

R¹⁰ represents hydrogen, methyl, ethyl, n- or iso-propyl, tert-butyl, methoxy, ethoxy, n- or iso-propoxy, tert-butoxy, cyclopropyl; trifluoromethyl, trifluoromethoxy,

R¹¹ represents hydrogen, methyl, ethyl, n- or iso-propyl, n-, iso-, sec- or tert-butyl,

A represents a radical of the formula (A1)

$$\mathbb{R}^{12}$$
 \mathbb{R}^{13}
 \mathbb{R}^{14}
(A1), wherein

R¹² represents hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, isopropyl, monofluoromethyl, monofluoroethyl, difluoromethyl, trifluoromethyl, difluorochloromethyl, trichloromethyl, dichloromethyl, cyclopropyl,

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methoxy, ethoxy, trifluoromethoxy, trichloromethoxy, methylthio, ethylthio, trifluoromethylthio or difluoromethylthio and

R¹³ represents hydrogen, fluorine, chlorine, bromine, iodine or methyl and

R¹⁴ represents hydrogen, methyl, ethyl, iso-propyl, trifluoromethyl, difluoromethyl, hydroxymethyl, hydroxyethyl or phenyl,

or

A represents a radical of the formula (A2)

R¹⁵ and R¹⁶ independently of one another each represent hydrogen, fluorine, chlorine, bromine, methyl, ethyl, difluoromethyl, trifluoromethyl, difluorochloromethyl or trichloromethyl and

R¹⁷ represents fluorine, chlorine, bromine, cyano, methyl, trifluoromethyl, trifluoromethoxy, difluoromethoxy, difluorochloromethoxy or trichloromethoxy,

15 or

A represents a radical of the formula (A4)

R²¹ represents hydrogen, fluorine, chlorine, bromine, iodine, hydroxyl, cyano, methyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, difluoromethyl, trifluoromethyl, trifluoromethyl, trifluoromethoxy, difluorochloromethoxy, trichloromethoxy, trifluoromethylthio, difluoromethylthio, difluorochloromethylthio or trichloromethylthio,

or

25 A represents a radical of the formula (A5)

$$\mathbb{R}^{23}$$
 (A5), wherein

R²² represents fluorine, chlorine, bromine, iodine, hydroxyl, cyano, methyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, trifluoro-methyl, difluoromethyl, difluorochloromethyl, trichloromethyl, methoxy, ethoxy, methylthio, ethylthio, difluoromethylthio, trifluoromethylthio, tri-

fluoromethoxy, difluoromethoxy, difluorochloromethoxy or trichloromethoxy and

R²³ represents hydrogen, fluorine, chlorine, bromine, iodine, cyano, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, trifluoromethyl, difluoromethyl, difluoromethyl, trichloromethyl, methoxy, ethoxy, methylthio, ethylthio, trifluoromethoxy, difluoromethoxy, difluorochloromethoxy, trichloromethoxy, methylsulphinyl or methylsulphonyl,

or

A represents a radical of the formula (A6)

$$R^{25}$$
 (A6), wherein

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R²⁴ represents methyl, ethyl, trifluoromethyl, difluoromethyl, difluorochloromethyl or trichloromethyl and

R²⁵ represents methyl,

Q³ represents a sulphur atom or CH₂,

p represents 0,

or

A represents a radical of the formula (A9)

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R²⁸ and R²⁹ independently of one another each represent hydrogen, fluorine, chlorine, bromine, methyl, ethyl, trifluoromethyl, difluoromethyl, difluorochloromethyl or trichloromethyl and

R³⁰ represents hydrogen, fluorine, chlorine, bromine, iodine, methyl, ethyl, trifluoromethyl, difluoromethyl, difluorochloromethyl or trichloromethyl,

or

25 A represents a radical of the formula (A11)

R³⁴ represents hydrogen, fluorine, chlorine, bromine, amino, methylamino, dimethylamino, cyano, methyl, ethyl, trifluoromethyl, difluoromethyl, difluoromethyl or trichloromethyl and

R³⁵ represents fluorine, chlorine, bromine, methyl, ethyl, trifluoromethyl, difluoromethyl, difluorochloromethyl or trichloromethyl,

or

A represents a radical of the formula (A17)

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R⁴³ preferably represents fluorine, chlorine, bromine, iodine, methyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, trifluoromethyl, difluoromethyl, difluoromethyl, trichloromethyl,

10 excluded compounds of the formula (I), in which

R represents hydrogen and

R¹, R² and R³ independently of one another each represents hydrogen, fluorine, chlorine, bromine; methyl, ethyl, n- or iso-propyl, n-, iso-, sec- or tert-butyl; or trifluoromethyl or trifluoroethyl; and

15 R⁴ represents hydrogen and

A represents a radical of the formula (A1)

$$R^{12}$$
 N
 R^{13}
 R^{14}
(A1), wherein

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R¹² represents fluorine, chlorine, bromine, iodine, methyl, ethyl, iso-propyl, monofluoromethyl, monofluoromethyl, difluoromethyl, trifluoromethyl, difluoromethyl and

R¹³ represents hydrogen and

R¹⁴ represents methyl,

or

A represents a radical of the formula (A2)

 R^{15} and R^{16} independently of one another each represent hydrogen, methyl or ethyl and

R¹⁷ represents fluorine, chlorine, bromine, methyl, ethyl, or trifluoromethyl,

or

A represents a radical of the formula (A4)

(A4), wherein

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R²¹ represents fluorine, chlorine, bromine, iodine, methyl, ethyl, n-propyl, iso-propyl, n-butyl, iso-butyl, sec-butyl, tert-butyl, difluoromethyl, trifluoromethyl, difluorochloromethyl, trichloromethyl,

or

. A represents a radical of the formula (A5)

$$R^{23}$$
 N R^{22}

(A5), wherein

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R²² represents fluorine, chlorine, bromine, iodine and

R²³ represents hydrogen,

or

A represents a radical of the formula (A6)

$$R^{25}$$
 Q^3 R^{24} Q^3

(A6), wherein

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R²⁴ represents methyl and

Q³ represents a sulphur or CH₂,

p represents 0,

or

A represents a radical of the formula (A9)

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 R^{28} and R^{29} independently of one another each represent hydrogen, methyl or ethyl and

R³⁰ represents methyl,

or

A represents a radical of the formula (A11)

(A11), wherein

R³⁴ represents hydrogen, methyl or ethyl and

R³⁵ represents fluorine, chlorine, bromine, methyl, ethyl, trifluoromethyl, difluoromethyl or trichloromethyl.

- Pyridinylanilides of the formula (I) according to Claims 1, 2 or 3, in which R⁴ represents hydrogen.
 - 5. Pyridinylanilides of the formula (1) according to Claims 1, 2 or 3, in which R represents hydrogen.

6. Pyridinylanilides of the formula (I-12)

in which

R, R⁴ and A are as defined in Claims 1, 2 or 3 and

R^{1a} represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thio-carbamoyl;

or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety;

or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkyl-carbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

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or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

- Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and
- Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy.

7. Pyridinylanilides of the formula (I-13)

in which

R, R⁴ and A are as defined in Claims 1, 2 or 3 and

20 R^{1a} represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thio-carbamoyl;

or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety;

or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

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or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

- Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and
- Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy.

8. Pyridinylanilides of the formula (I-14)

25 in which

R, R⁴ and A are as defined in Claims 1, 2 or 3 and

 R^{1a} and R^{2a} independently of one another each represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl;

or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety;

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or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

- Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and
- Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy.

9. Pyridinylanilides of the formula (1-15)

30 in which

R, R⁴ and A are as defined in Claims 1, 2 or 3 and

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R^{1a} and R^{2a} independently of one another each represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl; or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety; or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms; or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms; or represents in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms; or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyl or halogenoalkenyl or halogenoalkenyl or halogenoalkenyl or halogenoalkenyl or halogen atoms; or represents in each case straight-chain or branched alkylamino dialkylamino alkylamino alkylamino

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

- Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and
- Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy.

10. Pyridinylanilides of the formula (I-16)

in which

R, R⁴ and A are as defined in Claims 1, 2 or 3 and

R^{1a}, R^{2a} and R^{3a} independently of one another each represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl;

or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety;

or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkyl-carbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

- Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and
- Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl

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having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy.

- 5 11. Process for preparing pyridinylanilides of the formula (I) according to Claim 1, characterized in that
 - a) carboxylic acid derivatives of the formula (II)

in which

X1 represents halogen or hydroxyl and

A is as defined in Claim 1,

are reacted with amines of the formula (III)

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in which

R, R¹, R², R³ and R⁴ are as defined in Claim 1,

if appropriate in the presence of a catalyst, if appropriate in the presence of a condensing agent, if appropriate in the presence of an acid binder and if appropriate in the presence of a diluent,

20 or

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b) halogeno-carboxamides of the formula (IV)

in which

R, R⁴ and A are as defined in Claim 1, and

X² represents bromine or iodine,

are reacted with boronic acid derivatives of the formula (V)

in which

R¹, R² and R³ are as defined in Claim 1, and

A¹ and A² each represent hydrogen or together represent tetramethylethylene, in the presence of a catalyst, if appropriate in the presence of an acid binder and if appropriate in the presence of a diluent,

or

c) carboxamide boronic acid derivatives of the formula (VI)

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in which

R, R⁴ and A are as defined in Claim 1, and

 ${\rm A}^3$ and ${\rm A}^4$ each represent hydrogen or together represent tetramethylethylene,

are reacted with pyridinyl derivatives of the formula (VII)

$$R^3$$
 R^2
 R^2
 R^3
 R^2

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in which

R¹, R² and R³ are as defined in Claim 1,

in the presence of a catalyst, if appropriate in the presence of an acid binder and if appropriate in the presence of a diluent,

20 or

d) halogeno-carboxamides of the formula (IV)

in which

R, R⁴ and A are as defined in Claim 1, and

X² represents bromine or iodine,

are reacted with pyridinyl derivatives of the formula (VII)

in which

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R¹, R² and R³ are as defined in Claim 1,

in the presence of a palladium or platinum catalyst and in the presence of 4,4,4',4',5,5,5',5'-octamethyl-2,2'-bis-1,3,2-dioxaborolane [bis(pinacolato)diboron], if appropriate in the presence of an acid binder and if appropriate in the presence of a diluent,

or

e) pyridinylanilides of the formula (I-1)

in which

R, R¹, R², R³ and A are as defined in Claim 1,

are reacted with halogenides of the formula (VIII)

$$R^{4a} X^3$$
 (VIII)

in which

X³ represents chlorine, bromine or iodine,

R^{4a} represents C₁-C₈-alkyl, C₁-C₆-alkylsulfinyl, C₁-C₆-alkylsulfonyl, C₁-C₄-alkyloxy-C₁-C₄-alkyl, C₃-C₈-cycloalkyl; C₁-C₆-halogenoalkyl, C₁-C₄-halogenoalkylsulfonyl, halogeno-cycloalkyloxy-C₁-C₄-alkoxy-C₁-C₄-alkyl, C₃-C₈-halogenocycloalkyl having in each case 1 to 9 fluorine-, chlorine- and/or bromine atoms; formyl-C₁-C₃-alkyl, (C₁-C₃-alkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃-alkoxy)carbonyl-C₁-C₃-alkyl; (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-alkyl, (C₁-C₃-halogenoalkoxy)carbonyl-C₁-C₃-alkyl having in each case 1 to 7 fluorine-, chlorine- and/or bromine atoms,

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(C₁-C₃-alkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-alkoxy)carbonyl-C₁-C₃-halogenoalkyl having in each case 1 to 6 fluorine-, chlorine- and/or bromine atoms, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl, (C₁-C₃-halogenoalkyl)carbonyl-C₁-C₃-halogenoalkyl having in each case 1 to 13 fluorine-, chlorine- and/or bromine atoms; -COR⁵, -CONR⁶R⁷ or -CH₂NR⁸R⁹,

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R⁵, R⁶, R⁷, R⁸ and R⁹ are as defined in Claim 1,

in the presence of a base and in the presence of a diluent.

- 12. Compositions for controlling unwanted microorganisms, characterized in that they comprise at least one pyridinylanilide of the formula (I) according to Claim 1, in addition to extenders and/or surfactants.
 - 13. Use of pyridinylanilides of the formula (I) according to Claim 1 for controlling unwanted microorganisms.

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- 14. Method for controlling unwanted microorganisms, characterized in that pyridinylanilides of the formula (I) according to Claim 1 are applied to the microorganisms and/or their habitats.
- 15. Process for preparing compositions for controlling unwanted microorganisms, characterized in that pyridinylanilides of the formula (I) according to Claim 1 are mixed with extenders and/or surfactants.

16. Amines of the formula (III)

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in which

R, R¹, R², R³ and R⁴ are as defined in Claim 1, excluded compounds of the formula (III), in which

R represents hydrogen and ^

R¹, R² and R³ independently of one another each represents hydrogen, halogen, straight-chain or branched alkyl having 1 to 4 carbon atoms or straight-chain or branched halogenoalkyl having 1 to 4 carbon atoms; and R⁴ represents hydrogen.

17. Amines of the formula

in which

R and R⁴ are as defined in Claims 1, 2 or 3 and

R^{1a} represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl;

or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety;

or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkyl-carbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and

Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl

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having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C_1 - C_4 -alkyl and C_1 - C_4 -alkoxy.

5 18. Amines of the formula

in which

R and R4 are as defined in Claims 1, 2 or 3 and

R^{1a} represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl;

or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety;

or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and

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Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy, represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy.

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19. Amines of the formula

in which

R and R⁴ are as defined in Claims 1, 2 or 3 and

R^{1a} and R^{2a} independently of one another each represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl;

or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety;

or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms

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in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping -C(Q1)=N-Q2, wherein

 Q^{i} represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and

 Q^2 represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C1-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄alkyl)amino or phenyl; or represents C2-C4-alkenyloxy or C2-C4-alkynyloxy,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy.

20. Amines of the formula

in which

R and R4 are as defined in Claims 1, 2 or 3 and

R^{1a} and R^{2a} independently of one another each represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl;

or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety; or represents in each case straight-chain or branched alkenyl or alkenyloxy having in

each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

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or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkyl-carbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and

Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy.

21. Amines of the formula

25 in which

R and R⁴ are as defined in Claims 1, 2 or 3 and

R^{1a}, R^{2a} and R^{3a} independently of one another each represents halogen, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl, thiocarbamoyl; or represents in each case straight-chain or branched alkyl, hydroxyalkyl, oxoalkyl, alkoxy, alkoxyalkyl, alkylthioalkyl, dialkoxyalkyl, alkylthio, alkylsulfinyl or alkylsulfonyl having in each case 1 to 8 carbon atoms in the respective alkyl moiety;

or represents in each case straight-chain or branched alkenyl or alkenyloxy having in each case 2 to 6 carbon atoms;

or represents in each case straight-chain or branched halogenoalkyl, halogenoalkoxy, halogenoalkylthio, halogenoalkylsulfinyl or halogenoalkylsulfonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms;

or represents in each case straight-chain or branched halogenoalkenyl or halogenoalkenyloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms;

or represents in each case straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, arylalkylaminocarbonyl, dialkylaminocarbonyloxy having 1 to 6 carbon atoms in the respective hydrocarbon chain, alkenylcarbonyl or alkynylcarbonyl having 2 to 6 carbon atoms in the respective hydrocarbon chain;

or represents cycloalkyl or cycloalkyloxy having in each case 3 to 6 carbon atoms; or represents the grouping $-C(Q^1)=N-Q^2$, wherein

- Q¹ represents hydrogen, hydroxyl or C₁-C₄-alkyl, C₁-C₄-halogenoalkyl having 1 to 9 identical or different halogen atoms, or C₃-C₆-cycloalkyl and
- Q² represents hydroxyl, amino, methylamino, phenyl, benzyl; or represents C₁-C₄-alkyl or C₁-C₄-alkoxy, each of which is optionally substituted by halogen, cyano, hydroxyl, C₁-C₄-alkoxy, C₁-C₄-alkylthio, C₁-C₄-alkylamino, di(C₁-C₄-alkyl)amino or phenyl; or represents C₂-C₄-alkenyloxy or C₂-C₄-alkynyloxy,

represents phenyl, phenoxy, phenylthio, benzoyl, benzoylethenyl, cinnamoyl, heterocyclyl or phenylalkyl, phenylalkyloxy, phenylalkylthio or heterocyclylalkyl having in each case 1 to 3 carbon atoms in the respective alkyl moieties, each of which is optionally mono- to tri-substituted, identically or differently, in the ring moiety by halogen, in each case straight-chain or branched C₁-C₄-alkyl and C₁-C₄-alkoxy.

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